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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/576,223	04/14/2006	Bart Van Coppenolle	DECL58.003APC	7369
20995 7590 04/26/2007 KNOBBE MARTENS OLSON & BEAR LLP 2040 MAIN STREET FOURTEENTH FLOOR IRVINE, CA 92614			EXAMINER SUAREZ, FELIX E	
			ART UNIT 2857	PAPER NUMBER
SHORTENED STATUTORY PERIOD OF RESPONSE		NOTIFICATION DATE	DELIVERY MODE	
3 MONTHS		04/26/2007	ELECTRONIC	

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Notice of this Office communication was sent electronically on the above-indicated "Notification Date" and has a shortened statutory period for reply of 3 MONTHS from 04/26/2007.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

jcartec@kmob.com
eOAPilot@kmob.com

Office Action Summary

Application No.

10/576,223

Applicant(s)

VAN COPPENOLLE ET AL.

Examiner

Felix E. Suarez

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 28 November 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-30 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-30 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 14 April 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Abstract

1. This application does not contain an abstract of the disclosure as required by 37 CFR 1.72(b). An abstract on a separate sheet is required.

Claim Rejections - 35 USC § 101

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

2. Claims 1-30, are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

A process is statutory if it requires physical acts to be performed outside the computer independent of and following the steps to be performed by a programmed computer, where those acts involve the manipulation of tangible physical objects and result in the object having a different physical attribute or structure. *Diamond v. Diehr*, 450 U.S. at 187, 209 USPQ at 8 (see MPEP 2106). A claim is limited to a practical application when the method, as claimed, produces a concrete, tangible and useful result; i.e., the method recites a step or act of producing something that is concrete, tangible and useful. In determining whether the claim is a "practical application," the focus is not on whether the steps taken to achieve a particular result are useful, tangible and concrete, but rather that the final achieve by the claimed invention is "useful, tangible and concrete." For an invention to be "useful" it must satisfy the utility requirement of

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section 35 U.S.C. 101, the invention is useful based on the utility is specific, substantial and credible (see MPEP 2107); for an invention to be "tangible" the process claimed must set forth a practical application to produce a real-world result, "An application of a law of nature or mathematical formula to a process may well be deserving of patent protection" Dier, 450 U. S. at 187, 209 USPQ at 8; and for "concrete" the process must have a result that can be substantially repeatable or the process must substantially produce the same result again.

The claimed invention recites a method (or a computer readable medium or a device) of evaluating a physical object, the method comprising:

- reading instructions of a macro,

- said macro configured for use with measurement equipment,
 - capable of performing measurements of a physical object,

- said macro comprising instructions to perform an evaluation of a physical object;

- performing the instructions of said macro upon a numerical representation of the surface of said object; and

- obtaining from the macro results, an evaluation of the physical object.

The claimed invention recites reading instructions or acquiring data with a Numerical Control tool; performing the instructions to obtain another data set; and after these steps, proceeds, from the data set obtained to do an evaluation; but the claimed invention does not result in a physical transformation outside the computer; and does not recite a useful, concrete and tangible result.

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Here, the result of claims, "an evaluation of the physical evaluation" is not a step that enables the usefulness of the invention to be realized.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this

Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1-4, 6, 8-12, 14-22 and 28-30 are rejected under 35 U.S.C. 102(b) as being unpatentable over Matsumoto et al. (U.S. Patent No. 5,291,393).

With respect to claims 1, 19 and 28, Matsumoto et al. (hereafter Matsumoto) teaches a method (or a computer readable medium or a device) of evaluating a physical object, the method comprising:

reading instructions of a macro (see col. 7, lines 44-46),

said macro configured for use with measurement equipment, said measurement equipment being capable of performing measurements of a physical object (see col. 8, lines 5-17),

said macro comprising instructions for said equipment to perform an evaluation of a physical object (see col. 8, lines 35-45);

performing the instructions of said macro upon a numerical representation of the surface of said object so as to generate macro results (see col. 7, lines 22-32 and col. 8, lines 5-17); and

obtaining from the macro results, an evaluation of the physical object (see col. 8, lines 35-45 and FIGS. 9, 12) .

With respect to claims 2 and 29, Matsumoto further teaches, said numerical representation of the surface is obtained by scanning part or all of the physical object using an object scanner (see col. 7, lines 22-32).

With respect to claim 3, Matsumoto further teaches, said numerical representation of the surface is any of point cloud data, triangulated mesh data, rendered surface data, and polyline data (see col. 6, lines 34-40; col. 11, lines 34-41 and FIG. 11).

With respect to claims 4 and 30, Matsumoto further teaches, said measurement equipment is a Coordinate Measuring Machine, CMM (see col. 10, lines 43-58).

With respect to claim 6, Matsumoto further teaches, said macro comprises CMM commands (see col. 9, lines 36-50).

With respect to claim 8, Matsumoto further teaches, comprising communicating the said evaluation in the format of CMM measurement results (see col. 9, lines 36-50 and TABLE 2, 4).

With respect to claim 9, Matsumoto further teaches that, the instructions of said macro that are performed relate to the measurement of data from the numerical representation of the surface (see col. 10, lines 43-58).

With respect to claim 10, Matsumoto further teaches, comprising performing translations through the surface of the object (see col. 10, lines 43-48).

With respect to claim 11, Matsumoto further teaches that, the macro comprises instructions for performing a measurement comprising:

(a) determining elements of data that numerically represent the object, and that correspond to the position on the physical object to be measured, without increasing the resolution by calculating the co-ordinates of any additional points (see col. 10, lines 8-17);

(b) calculating additional points by interpolation of the determined elements, wherein the additional points increase the resolution in an area of a position to be measured (see col. 11, lines 34-41 and FIG. 11);

(c) calculating from the area of increased resolution a measurement of the object (see col. 11, lines 42-62).

With respect to claim 12, Matsumoto further teaches that, one or more instructions of said macro have been created by using said numerical representation of the physical object (see col. 10, lines 8-17).

With respect to claim 14, Matsumoto further teaches, said instructions are part of a measurement sequence generated by recording commands of a Coordinate Measuring Machine measurement program (see col. 10, lines 8-17).

With respect to claim 15, Matsumoto further teaches, said instructions are part of a measurement sequence in a Coordinate Measuring Machine measurement program (see col. 10, lines 19-42).

With respect to claim 16, Matsumoto further teaches, said evaluation comprises the execution of steps on a computer in an automatic way without interaction with the user of said computer during the execution of said steps (see col. 10, lines 42).

With respect to claim 17, Matsumoto teaches, a method for virtually measuring an object using a cloud of points virtually representing said object and calculating the value or values that approximate the value or values that would result from the measurement of said object by a measuring device (see col. 11, lines 34-40).

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With respect to claim 18, Matsumoto teaches, a method for virtually probing an object using a cloud of points virtually representing said object and calculating or selecting the point that approximates the point that would result from the probing of a CMM on the said object (see col. 11, lines 42-53).

With respect to claim 20, Matsumoto further teaches, comprising instructions which, when executed cause the computer to receive a numerical representation of the physical object from a remote computer (see col. 1 line 63 to col. 12 line 20).

With respect to claim 21, Matsumoto further teaches that, the numerical representation is received from the remote computer by physical transport of a computer readable storage medium holding said numerical representation (see col. 11 line 63 to col. 12 line 20).

With respect to claim 22, Matsumoto further teaches, said computer readable storage medium comprises magnetic disk, magnetic tape (see col. 7, lines 33-44).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 23-26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Matsumoto et al. (U.S. Patent No. 5,291,393) in view of Kreidler et al. (U.S. Patent No. 6,954,680).

With respect to claim 23, Matsumoto et al. (hereafter Matsumoto) further teaches providing instructions, which, when executed cause the computer to display a user interface (see col. 7, lines 54-59).

Matsumoto does not teach displaying a user interface on a web browser of a remote computer connected to the Internet.

But Kreidler et al. (hereafter Kreidler) teaches in a system for the electronic provision of services for machines via a data communication link, that, in the area of industrial automation technology and, in particular, in the field of numerically controlled processing machines, on the basis of an Internet connection, automatic services or data contents or software components required for this purpose are made available to a plurality of end-customers having machines with which information is exchanged bi-directionally (see Kreidler; col. 7, lines 3-9).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Matsumoto to include services for machines via data communication link as taught by Kreidler, because the services for machines via data communication are made to a plurality of end-

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customers having machines with witch information is exchanged bi-directionally through Internet, as desired.

Matsumoto further teaches, said interface allowing a user to send the numerical representation of the physical object over the Internet to a computer configured to perform said method (see Matsumoto; col. 7, lines 54-59).

With respect to claims 24-26, Matsumoto further teaches providing instructions, which, when executed, cause the computer to display a user interface (see col. 7, lines 54-59).

Matsumoto does not teach, displaying a user interface on a web browser of a remote computer connected to the Internet, said interface allowing a user to send said macro (or the title of said macro) over the Internet to a computer configured to perform said method.

But Kreidler teaches in a system for the electronic provision of services for machines via a data communication link, that, in the area of industrial automation technology and, in particular, in the field of numerically controlled processing machines, on the basis of an Internet connection, automatic services or data contents or software components required for this purpose are made available to a plurality of end-customers having machines with witch information is exchanged bi-directionally (see Kreidler; col. 7, lines 3-9).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Matsumoto to include services for machines via data communication link as taught by Kreidler, because the

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services for machines via data communication link allows to a plurality of end-customers having machines with information, exchange this information bi-directionally through Internet, as desired.

5. Claim 27 is rejected under 35 U.S.C. 103(a) as being unpatentable over Matsumoto et al. (U.S. Patent No. 5,291,393) in view of Rabin et al. (U.S. Patent No. 6,697,948).

With respect to claim 27, Katsumoto teaches all the features of the claimed invention, except that Katsumoto does not teach, providing instructions, which, when executed, cause the computer to display a pay-per-use interface on a web browser of a remote computer connected to the Internet, said pay-per-use interface configured to perform one or more of the following:

- (a) requesting a username and password to the remote computer user so as to enable a user to access an account for using the method;
- (b) requesting billing information of the remote computer user;
- (c) indicating a billing amount to the remote computer user, the billing amount relating to the number of evaluations performed; and
- (d) providing a username and password to the remote computer user so as to enable a user to access an account for using the method.

But Rabin et al. (hereafter Rabin) teaches in an apparatus for protecting information that, as an example of pay-per-use or pay-per-view, each time an instance of pay-per-use software is used, the supervising program (SP) can

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record this in the RUN COUNT field. The RUN COUNT information can later be used for billing purposes (see Rabin; col. 43, lines 37-43).

Rabin also teaches that, an example of the user identification ID (USER) may be a username and/or password combination. An example of the identification of the user device ID (DEVICE) may include the hostname, host id, IP address, serial number or other hardware or device specific information that can uniquely distinguish this user device from other user devices (see Rabin; col. 44, lines 1-7).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Matsumoto to include the supervising program as taught by Rabin, because the supervising program allows to execute a pay-per-use instructions requesting username and/or password combination for a billing purpose, as desired.

Conclusion

Prior Art

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Sawaga et al. [U.S. Patent No. 6,804,575] describes an automatic programming apparatus that executes a numerical controller process.

Sutula, JR. [U.S. Patent Application Publication No. 2002/0114537] describes a model surface by numerical control.

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Yamazaki et al. [U.S. Patent No. 6,400,998] describes a numerical control machine tool system.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Felix Suarez, whose telephone number is (571) 272-2223. The examiner can normally be reached on weekdays from 8:30 a.m. to 5:00 p.m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Barlow can be reached on (571) 272-2269. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300 for regular communications and for After Final communications.

April 16, 2007

F.S.


John Barlow
Supervisory Patent Examiner
Technology Center 2800